

Editorial

What is a useful description? Assuming the individual worker is sufficiently acquainted with his group to be able to supply all of the morphological and allied data necessary for "adequate" treatment, is the description of a new species useful after it is published? One may write a description several pages long and not include the information necessary to recognize the form without use of the type, and another may describe the species by a few lines and make recognizable the species without recourse to the type. Obviously then, it is not the quantity of descriptive phrases which are included, but the quality which make a description useful.

The frustration of keying a specimen through the one existing key only to find that the specimen belongs somewhere between two species is a common experience. The backlog of isolated descriptions of species not included in this key is often discouraging, particularly when it is learned that most of these descriptions do not refer to the key or use comparable characters. Moreover, in these descriptions, the species to which the new form is compared is likely to be one which it superficially resembles and not one which has characteristics in common with the new form. The only possible course is to try and key the description through the key, and if enough characters are given, it may be possible to determine where these post-revision forms fall in the key, and then one is able to decide whether the forms in question belong to a described species, or are undescribed. But more likely than not, the post-revision descriptions will not give the characters necessary for such a procedure. The only recourse then is the types, several hundred to several thousand miles away.

In order for a description to be useful, the author must supply all of the information necessary for another biologist to recognize the form without reference to the type. Idealistically, the examination of types should be considered only as a final check and not as a routine procedure.

To describe a new species adequately, it is necessary to know all of the previously described species in the genus, at least from an area large enough to be reasonably sure that the form has not previously been described. This is done by means of keys and previous descriptions. If a worker has before him specimens which do not key to a species in existing keys, or agree with the description of any of the species not included in the key, assuming competence, accuracy of keys, and descriptions, the forms in question are considered to be undescribed. The worker then proceeds to describe this new form.

A species description in order to be adequate, must include the generic characters, either by actually stating them, or by indication in some manner such as reference to a description of the genus, but not by simply implying that such is the case just because the specific name is preceded by the generic name. Then the character which separates the new species from *all* of the other species included in the genus should be clearly stated. Follow this by a comparison with the species it most closely resembles, and finally, indicate how the species keys out in the most comprehensive key, and how it is separated at the point where it falls in the key. This is all that is necessary for an adequate and useful description of a species. Looking at the literature, how many isolated descriptions meet these requirements?